

CLAIMS

1. Fire-retarded compositions comprising, by weight, the total being 100 parts:

50 to 75 parts of a blend of a polyamide (A) and a polyolefin (B),

5 25 to 50 parts of a blend comprising:

0.1 to 48.8 parts of a fire retardant,

0.1 to 30 parts of a phosphorus-containing plasticizer,

0.1 to 10 parts of a zeolite,

the total of these three products being between 25 and 50.

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2. Compositions according to Claim 1, comprising, by weight, the total being 100 parts:

55 to 75 parts of a blend of a polyamide (A) and a polyolefin (B),

25 to 45 parts of a blend comprising:

15 0.1 to 25 parts of a fire retardant,

0.1 to 15 parts of a phosphorus-containing plasticizer,

0.1 to 5 parts of a zeolite,

the total of these three products being between 25 and 45.

20 3. Compositions according to Claim 2, comprising, by weight, the total being 100 parts:

55 to 75 parts of a blend of a polyamide (A) and a polyolefin (B),

25 to 45 parts of a blend comprising:

16 to 25 parts of a fire retardant,

25 8 to 15 parts of a phosphorus-containing plasticizer,

1 to 5 parts of a zeolite,

the total of these three products being between 25 and 45.

4. Compositions according to any one of the preceding claims, in
30 which the polyolefin (B) comprises (i) a high-density polyethylene (HDPE) and
(ii) a blend of a polyethylene (C1) and a polymer (C2) chosen from elastomers,

very low-density polyethylenes and ethylene copolymers, the (C1) + (C2) blend being cografed with an unsaturated carboxylic acid.

5 5. Compositions according to any one of the preceding claims, in
which the polyolefin (B) comprises (i) a high-density polyethylene (HDPE), (ii) a
polymer (C2) chosen from elastomers, very low-density polyethylenes and
ethylene copolymers, (C2) being grafted by an unsaturated carboxylic acid and
(iii) a polymer (C'2) chosen from elastomers, very low-density polyethylenes and
ethylene copolymers.

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6. Compositions according to any one of the preceding claims, in
which the polyolefin (B) comprises (i) polypropylene and (ii) a polyolefin which
results from the reaction of a polyamide (C4) with a copolymer (C3) comprising
propylene and an unsaturated monomer X, grafted or copolymerized.

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7. Compositions according to any one of the preceding claims, in
which the polyolefin (B) comprises (i) a polyethylene of the EVA, LLDPE,
VLDPE or metallocene type and (ii) an ethylene/alkyl (meth)acrylate/maleic
anhydride copolymer.

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8. Compositions according to any one of the preceding claims, in
which the polyolefin comprises two functionalized polymers comprising at least
50 mol% of ethylene units and able to react to form a crosslinked phase.

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9. Compositions according to any one of the preceding claims, in
which the fire retardant is chosen from ammonium phosphates, pyrophosphates
and polyphosphates, melamine phosphates, melamine phosphite, piperazine
phosphite and diphosphite, guanazole phosphate, melamine pyrophosphate and
piperazine pyrophosphate.

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10. Compositions according to any one of the preceding claims, in which the phosphorus-containing plasticizer is chosen from isopropylphenyl phosphate, diphenyl phosphate and triphenyl phosphate.

5 11. Compositions according to any one of the preceding claims, in which the zeolite is chosen from zeolites of the 3A, 4A, 5A, 10X and 13X type.